

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A plasma processing apparatus comprising a shower plate having a plurality of ejection holes for ejecting a gas, a microwave antenna, and a cover plate interposed between said shower plate and said microwave antenna, said cover plate having cylindrical shaped projections which are directed to the shower plate ~~with a space left between the cover plate and the shower plate and~~ which are arranged with intervals among them to define a space restricted by the cylindrical shaped projections between the cover plate and the shower plate, the cover plate being formed by a material which has a relative dielectric constant smaller than that of a material of said shower plate so as to suppress an abnormal discharge in the space left between the cover plate and the shower plate.

2. (Previously Presented) A plasma processing apparatus according to claim 1, wherein the material of said cover plate is smaller in relative dielectric constant and is larger in thermal conductivity as compared with the material of said shower plate.

3. (Previously Presented) A plasma processing apparatus according to claim 2, wherein the material of said cover plate is smaller in relative dielectric constant and larger in the thermal conductivity as compared with the material of said shower plate and further has a dielectric loss of 1×10^{-3} or less in microwave.

4. (Previously Presented) A plasma processing apparatus according to claim 1, the material of said cover plate contains at least one of silicon nitride and quartz and the material of said shower plate contains alumina.

5. (Currently Amended) A plasma processing apparatus comprising a shower plate having a plurality of ejection holes for ejecting a gas, a microwave antenna, and a cover plate interposed between said shower plate and said microwave antenna, wherein said cover plate comprises a plurality of ~~projection-like portions~~ cylindrical shaped projections contacted with said shower plate at portions at which no ejection holes are present on one of main

surfaces of said shower plate, with spaces restricted by the cylindrical shaped projections left between the cover plate and the shower plate;

~~wherein said projection-like portions are each formed by obtuse angles or a curved line when said one of main surfaces of said cover plate is seen from the above and leave a space between the cover plate and the shower plate, and~~

wherein said cover plate is formed by a material which has a relative dielectric constant smaller than that of a material of said shower plate so as to suppress an abnormal discharge in the spaces restricted by the cylindrical shaped projections left between the cover plate and the shower plate.

6. (Previously Presented) A plasma processing apparatus according to claim 5, wherein said projection-like portions each form a circle when said one of main surfaces of said cover plate is seen from the above.

7. (Withdrawn) A plasma processing apparatus comprising a shower plate having a plurality of ejection holes for ejecting a gas, a microwave antenna, and a cover plate interposed between said shower plate and said microwave antenna, said plasma processing apparatus characterized in that one of main surfaces of said cover plate comprises connected projection-like portions contacted with said shower plate at which no ejection holes are present on one of main surfaces of said shower plate and hollow-like portions other than said projection-like portions, and said hollow-like portions include a curved line portion connected to upper portions of said ejection holes at said one of main surfaces of said shower plate and a gas introducing portion for introducing the gas into said curved line portion.

8. (Withdrawn) A plasma processing apparatus according to claim 7, characterized in that said curved line portion of said hollow-like portions includes a plurality of ring-shaped portions forming concentric circles and said gas introducing portion of said hollow-like portions includes a linear portion connecting said ring-shaped portions.

9. (Withdrawn) A plasma processing apparatus comprising a shower plate having a plurality of ejection holes for ejecting a gas, a microwave antenna, and a cover plate interposed between said shower plate and said microwave antenna, said plasma processing

apparatus characterized by including a structure wherein one of main surfaces of said cover plate comprises at least one projection-like portion contacted with said shower plate at portions at which no ejection holes are present on one of main surfaces of said shower plate and a gas distribution portion that is not contacted with said portions and that forms a gas distribution space between itself and said one of main surfaces of said shower plate, and means for introducing the gas to said one of main surfaces of said shower plate in order to cause the gas to flow into said ejection holes of said shower plate introduces the gas to said gas distribution portion at said one of main surfaces of said cover plate from its peripheral portion.

10. (Withdrawn) A plasma processing method that carries out plasma processing using the plasma processing apparatus according to any one of claims 1 or 5.

11. (Withdrawn) A semiconductor manufacturing method that carries out plasma processing using the plasma processing apparatus according to any one of claims 1 or 5, thereby manufacturing a semiconductor device.

12. (Canceled).

13. (Canceled).

14. (Withdrawn) A method of manufacturing a liquid crystal display or an organic EL display, characterized by carrying out plasma processing using the plasma processing apparatus according to any one of claims 1 or 5.